

IMEL Biotherapeutics

Mitochondrial Rescue Therapy

IMEL co-founded by
Dr. Silvia Noiman, Pontifax
& Mr. Taro Inaba, Remiges

Technology invented
by Dr. Gojo of Kyoto
Prefectural University,
Japan and the IP
assigned to IMEL

IMEL develops a new paradigm
for the treatment of patients
with mitochondrial disorders

IMEL in a nutshell

Treatment based on a novel,
proprietary, understanding
of mitochondrial biology

Targeting multiple
mitochondrial
diseases, irrespective
of cause

Multi-billion dollars
markets with unmet need

Mitochondrial diseases



Mitochondrial diseases are caused by
mitochondrial dysfunction

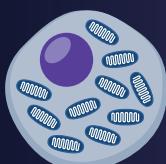


Primary mitochondrial dysfunction is
caused by:

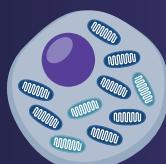
- Acquired and/or inherited mutations in
mitochondrial DNA – primary mitochondrial disease
- Accumulation of mutations in mitochondrial DNA as
a result of the aging process



The ratio of healthy-vs-mutated
mitochondrial DNA (heteroplasmy)
correlates with disease severity



Homoplasmcy:
a single mitochondrial
DNA type



Heteroplasmcy:
two or more mitochondrial
DNA types

Mitochondrial disorders

1:5000

birth has primary
mitochondrial disorder

> 100

primary/secondary
mitochondrial diseases

Multisystemic
disease
presentations incl.
central nervous
system, eyes,
skeletal muscle,
heart, liver etc.



Age of onset from
newborn to adulthood

Aging-related
diseases, incl.
neurodegenerative
diseases, have
mitochondrial
involvement

Seizures
Deafness

Liver failure

Renal disease

Hormone deficiencies

Myopathy

Stroke
Blindness

Cardiomyopathy
Diabetes

Enteropathy

Anemia

Neuropathy

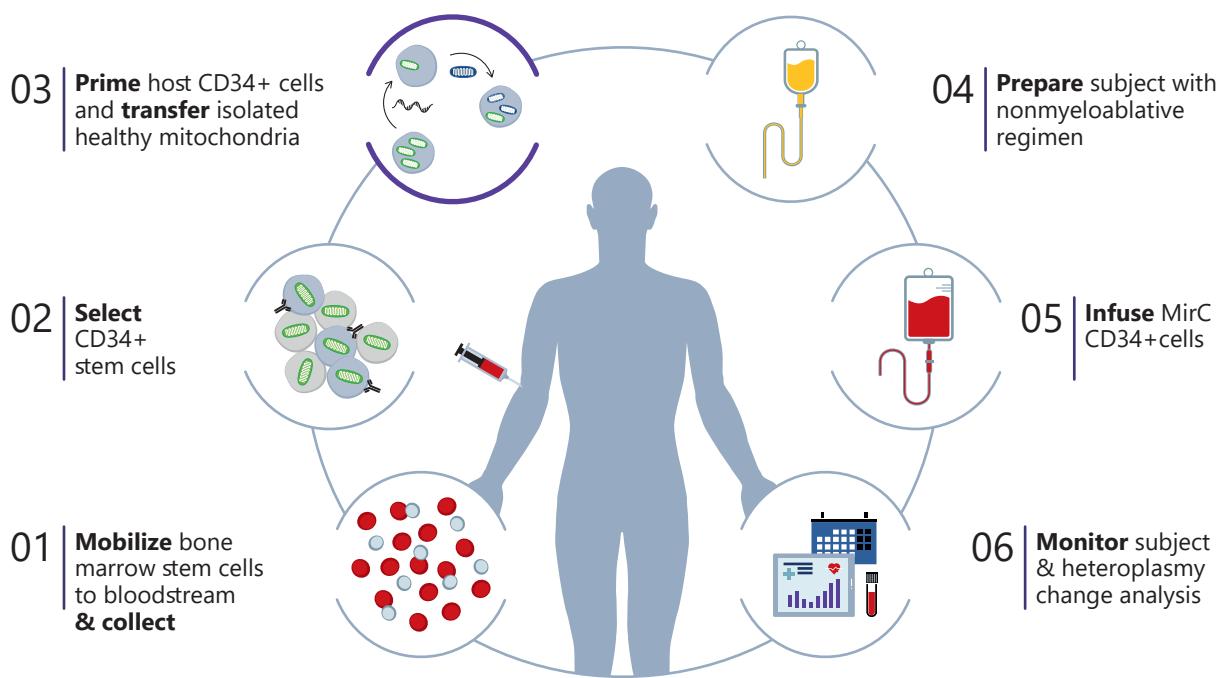


IMEL's 1st product – autologous MirC stem cells (CD34+)

IMEL employs routine autologous stem cells transplantation method



Adding a patented *ex vivo* step (03) to the routine transplantation process



Investors and Directors

PONTIFAX

Pontifax is a venture capital firm focusing on groundbreaking innovations in life sciences

Founded in 2004, Pontifax manages over \$775 M with a portfolio 80 companies

REMIGES VENTURES

Remiges is a US-Japanese venture capital firm focused on biotechnology and pharmaceutical companies

Founded in 2014, Remiges is developing IP from the Japanese academia

IMEL's BoD members:



Dr. Silvia Noiman | Co-Founder, Chairperson and CEO:

A leading life sciences executive with over 25 years' experience in the healthcare Industry, including Eloxx (ELOX), cCAM, Predix (EPIX)

Mr. Tomer Kariv | Director:

The co-founder and CEO of Pontifax. Serves as an active board member of many of the funds' portfolio companies, assuming a special responsibility for strategic planning

Mr. Taro Inaba | Co-Founder and Director:

Founder & Managing Partner at Remiges Ventures with >29 years of business experience. Serves as a director of Koinobori and for many of Remiges' portfolio companies



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